



VICINITY MAP



U.S. Engineer District, Louisville
Civil Support Area

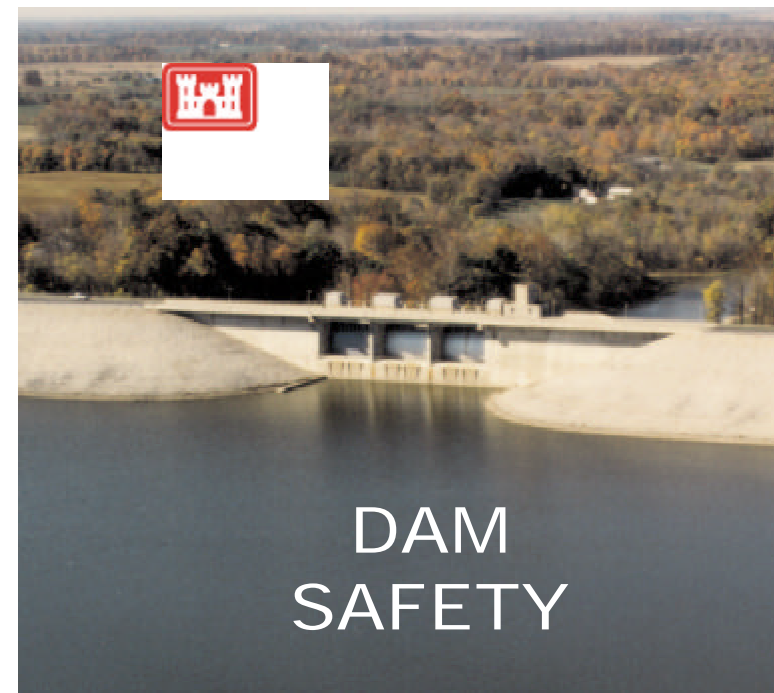


**US Army Corps
of Engineers**
Louisville District

The Louisville District is responsible for the safety of 20 reservoir dams and 14 navigations dams affecting parts of four states. For more information about Dam Safety and the Louisville District, contact:

**U.S. Army Corps of Engineers,
Louisville District
600 Dr. Martin Luther King, Jr. Place
Louisville, Kentucky 40202-2230
(502) 582-5736
<http://www.lrl.usace.army.mil>**

For Emergency (24 hour): (502) 774-3514



DAM SAFETY

The Louisville District has a comprehensive monitoring and inspection program to keep its dams safe from failure. A dam failure means a sudden, uncontrolled release of water. Uncontrolled water can be a deadly and destructive force, so the Corps of Engineers and the Louisville District strive to design, construct, maintain and operate safe dams.

DESIGN AND CONSTRUCTION

The Corps of Engineers designs and constructs dams to be safe under the most severe conditions. A flood control dam is designed to be structurally stable and safely pass the largest flood that can be expected to occur. The design of a dam and its foundation go through many stages of review by experienced engineers trained to make sure the dam will meet all safety requirements. When a dam is built, construction engineers and inspectors are on-site to make sure the dam is constructed correctly and conforms to the design. As technical knowledge improves, older dams are re-evaluated using current safety standards and modified as necessary.



INSPECTIONS

After a dam is built it is inspected regularly by people that know the structure and the signs of distress. Possible problems found during an inspection are investigated and corrected.

PROJECT STAFF INSPECTIONS

The men and women who operate and maintain a reservoir dam are those most familiar with their dam and inspect it most often. In addition to observing the dam as they perform their routine duties, they conduct weekly and monthly inspections of all important features. They are trained in Dam Safety and get expert help whenever they have a question or concern.

ANNUAL INSPECTIONS

Engineers and scientists from the Louisville District office inspect each reservoir dam at least once a year. They inspect critical features and review the condition and performance of the dam with project staff. The engineer or scientist may recommend further investigations or remedial work based on this inspection.

PERIODIC INSPECTIONS

Every reservoir dam gets a comprehensive inspection once every five years by an experienced team of engineers and scientists from the District Office. Engineers from the Ohio River Division Office normally participate as well. The inspection team members are knowledgeable in the design, construction and maintenance of the dam. The team inspects all parts of the structure; all gates, valves and operating equipment are inspected and tested. The inspection findings and recommendations are documented in a formal report and submitted to Corps offices in Cincinnati, Ohio and Washington, D.C. for review and approval. If the inspection team recommends remedial actions, the work is scheduled and completed as soon as possible.

MONITORING

Reservoir dams in the Louisville District are equipped with instruments to monitor conditions in critical areas. Just as abnormal temperature or blood pressure indicate human illness, there are measurements to indicate abnormal conditions in a dam. Dams have instruments to measure water pressure, seepage and movements. These instruments are read at regular intervals and the data are evaluated by engineers and scientists for signs of distress in the dam; the data is also compared with assumptions made during design of the structure. The data and evaluations are documented in the periodic inspection report as a permanent record of the dams performance.

EMERGENCY ACTION PLANS

Despite the care taken to design, build, maintain and operate dams safely; the possibility of failure still exists. The Louisville District recognizes that an emergency could occur and has planned for emergency response in case of seepage, potential dam failure, or an actual dam failure. A "Dam Safety Plan" has been developed for each reservoir dam to guide the emergency response. A Dam Safety Plan includes:

- Emergency Identification- How to recognize and judge emergency conditions. Possible problems are described along with their effects on the dam.
- Emergency Notification- Lists personnel and telephone numbers the project staff should contact. The names and telephone numbers of federal, state and local officials to be notified about a potential or actual dam failure are listed.
- Emergency Operation - How to respond to potential problems. Corrective measures are described to guide the project staff.

The District regularly reviews and revises the Dam Safety Plan. The district also conducts emergency exercises to test the response and actions that would be used in a real emergency.

DOWNSTREAM EVACUATION

Local officials decide if and when to evacuate downstream areas when the Corps notifies them about a dam emergency. Corps of Engineers staff do not evacuate the downstream areas; state and county emergency management agencies are responsible for planning and conducting evacuations. To assist in this planning, the Louisville District provides these agencies with maps of areas likely to be flooded if a reservoir dam fails.



TRAINING

Louisville District personnel inspect and monitor each dam and are trained to respond to emergencies. Frequent dam safety training keeps them aware of problems that could occur. Members of the Louisville District Dam Safety team are active in professional organizations which promote dam safety and share information about dams with colleagues in other agencies and Corps offices worldwide.



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